

US Army Corps of Engineers District: CEMV

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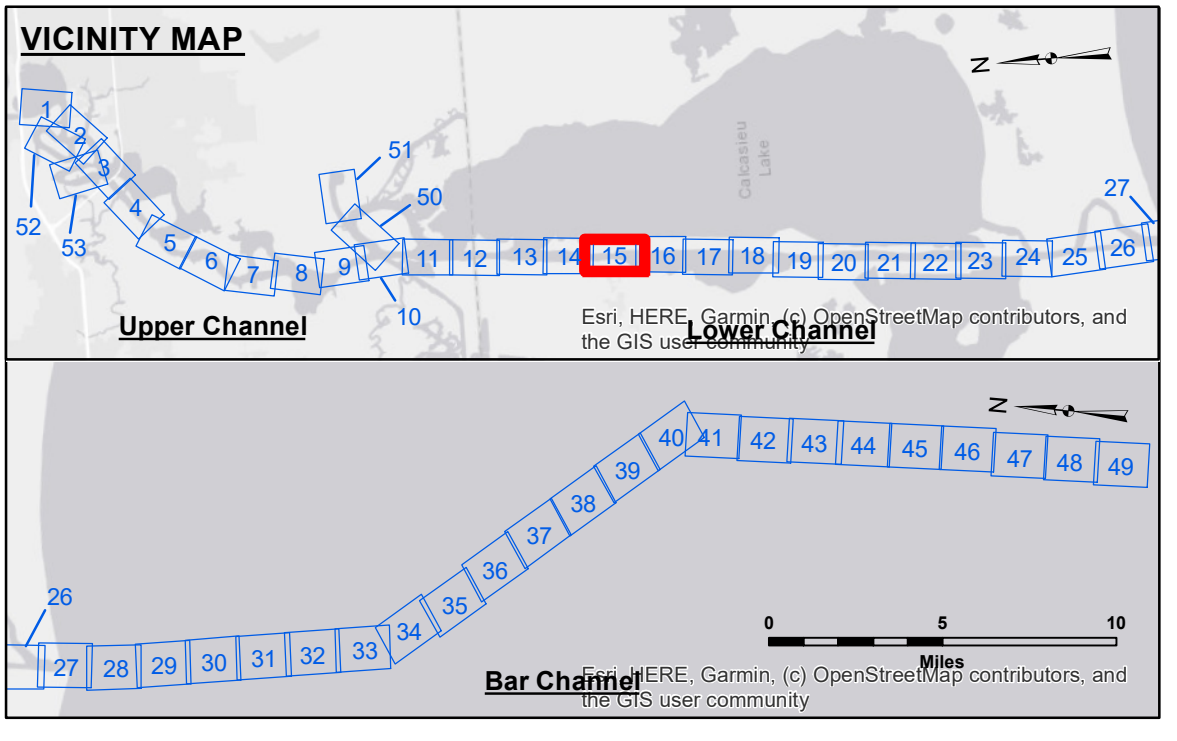
Information depicted on this map represents the results of a survey conducted on or after the date of the survey. It is not to be used for any purpose other than that for which it was intended. The recipient is responsible for the results and accuracy of the data for other than its intended purpose.

Submitted:	Surveyed By: SPPM
Recommended:	Plotted By: BD
Approved:	Checked By: AC

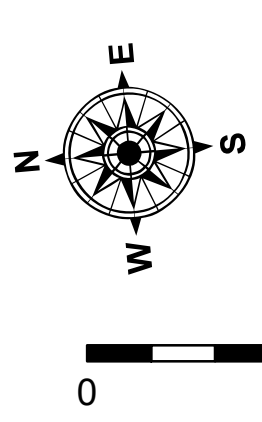
U.S. ARMY CORPS OF ENGINEERS
NEW ORLEANS DISTRICT

**CALCASIEU SHIP CHANNEL
LOWER SHEET 15
CR_15_LWR_20200123_CS
23 January 2020**

**Sheet Reference Number
15 of 53**



LEGEND		
--- Federal Navigation Channel	○ Cable Area	3 Fluff Thickness (feet)*
— Federal Navigation Center Line	□ Placement Area	● Shoalest Sounding**
— As-built Pipeline/Cable	⊗ Anchorage Area	★ Beacon, General
..... Unconfirmed Pipeline/Cable	⊗ Obstruction Point	◆ Red Navigation Buoy
— Project Depth Contour	⊗ Wrecks-Submerged	◆ Green Navigation Buoy



Gage Reading: HACKBERRY: 1.9 MLLW
Sea Conditions: CALM
Vessel Name: OB-167
Survey Type: CONDITION
Sounding Frequency***: LOW

Vertical Datum:
Soundings are shown in feet and indicate depths below Mean Lower Low Water Datum (MLLW).
Datum Relationships for gage 73600 as of December 2013:
0.0' NAVD88 (OPUS 2010) = 1.0' MLLW = 2.0' MLG or 0.0' MLLW = 1.0' MLG

Distances on the Calcasieu River are shown at 1 mile intervals.

The location of navigation aids are base on and provided by the U.S. Coast Guard and USACE survey crews.

2015 Aerial Photography data source: NAIP
Reference is N.O.A.A. Navigation Chart No. 11339.

* Difference between high and low frequency elevations where greater than 1.0'.
** Shoalest Sounding per Quarter per Reach.
*** High frequency (200 kHz) survey data represents the first signal return at a sounding location and will include suspended solids, known as "fluff", if present. Low frequency (20 kHz) survey data normally penetrates through this "fluff" layer to depict elevations of consolidated bottom material. Low frequency accuracies may vary depending on channel conditions and fathometer settings.

NOTES:

Horizontal Coordinate System:
North American Datum of 1983 (NAD83), projected to the State Plane Coordinate System (SPCS), Louisiana South Zone. Distance units in U.S. Survey Feet.

Vertical Datum:
Soundings are shown in feet and indicate depths below Mean Lower Low Water Datum (MLLW).
Datum Relationships for gage 73600 as of December 2013:
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